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Q1: I am a PI at "XXX University", and am confused about whether I must secure either GSFC or JPL as a partner for Project Management and end to end systems integration. Can you clarify this for me?

A1: Section 3.1 of the AO indicates that a PI "….may assemble the mission team from any and all…organizations, with the following caveat. If project management and end-to-end systems engineering are to be implemented from a NASA Center, these functions must be performed by a NASA Center designated by the Enterprise to do so. For the Space Science Enterprise (OSS), these Centers are JPL and GSFC." If the PI chooses to implement these functions external to NASA, they should keep in mind that (as with any element of the investigation), it should be accomplished with an institution which has suitable resources, experience, and capabilities.

Q2: Mission of Opportunity Investigations seem to have the same amount of proposal space (page count) as full Mission Investigations. Is this fair?

A2: Some Missions of Opportunity will NEED just as much space as a full mission investigation to discuss not only the investigation, but to also discuss the sponsoring mission in sufficient detail that NASA can evaluate the feasibility of the implementation of the investigation (note that the sponsoring mission is not evaluated for feasibility however) including the management and cost. No proposer, however, is obligated to fill all the allotted pages.

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Q3: The total of the available dollars when converted to FY in the funding profiles in the AO Appendix E do not seem to add up to the cost caps in the AO. Can you tell us why?

A3: The funding profile reflects the maximum amount of funding available each year. Proposals requiring funding beyond the last year of the Appendix E profiles are free to propose any funding profile beyond the last year of the Appendix E profiles so long as the total requirements do not exceed the AO cost caps ($325M for missions or $25M for missions of opportunity in FY03 dollars).

Q4: Given the AO provided Scout schedule and the expected $500K for the Phase A Concept Study, can part of the some portion of the cost of the investigation be carried over into FY 04? Also, since the total of FY dollars is only $313.5M through FY 08, can we get the missing additional funds in a year earlier.

A4: Appendix E provides the maximum available funding from MEP for each year. If the max of a preceding year is not used, it can be carried to the next year, provided the cap is not exceeded in doing so. Conversely, more funding than shown in a given year is likely not possible even if the total requested is below the cost cap. (Also see A3 above). If your operational phase ends in FY 08, you may request additional funds above the profiles in Appendix E for FY 08 provided you do not exceed the cost caps ($325M or $25M FY 03).

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Q5: Must a PI use the NASA provided launch services described in the *Mars Scout Launch Services Information Summary* document found in the Mars Scout Library for their Scout Investigation?

A5: ELV's for Mars Scouts must either be provided by NASA, if a domestic ELV is proposed, or contributed by the proposer, if a foreign ELV is proposed. In either case, the launch service must be consistent with NASA Policy Directive 8610.7, NASA Launch Services Risk Mitigation Policy and contributed ELV's will be so evaluated. If provided by NASA, the procurement will be managed by KSC who will provide technical oversight by way the NASA Launch Services (NLS) contract.

Q6: The AO would have us believe that proposals will be selected primarily based upon the science proposed. Meanwhile, however, a considerable amount of implementation data seems to be requested. Is this consistent?

A6: While, the selection is based primarily on the proposed science, mission implementation is also one of the evaluation criterion and it exercises a strong influence for selection. For Round 1 science proposals, it is recognized that all implementation details may not be fully developed,and there is inadequate page count to discuss these fully. However, all major aspects of the implementation concept must be provided in sufficient detail for NASA to judge the feasibility. If a full description is not possible, charts, foldouts, graphs, tables, etc. should be used to indicate what the concepts are.

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Q7: What is the scoring/weighting for each section and subsection of the proposal as outlined in Appendix B of the AO?

A7: The AO Section 7.2 provides the 3 evaluation criteria (two are which are science based) and their relative weighting (approximately equal). There is no further breakdown of that weighting.

Q8: Will the proposal summary be scored?

A8: The requirements of Appendix B of the AO, help to facilitate evaluation. Evaluation, however, will be on the entire proposal as a whole and not by individual sections.

Q9: Where in the proposal should re-scope opportunities be discussed?

A9: The term "re-scope" is not used in the AO, however, assuming you mean "descope", this important topic should be discussed in two ways: In the science section, proposers will need to define the baseline mission and the performance floor (See section 4.2 and note that this requirement does not exist for MOO's); and in the management section, we would hope to find the preliminary concept for how the investigation will be managed and the level of resiliency available to deliver a worthwhile scientific investigation within the agreed upon cost and schedule.

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Q10: Should the cost of the JPL's Mars Program Office oversight be included in our costing? (See Section 7.4.2 of the AO)

A10: No. The Mars Program Office oversight is funded at the Program Level. Proposers do not need to include the costs associated with this office.

Q11: The use of Mars infrastructure and the DSN in general is listed as one of the evaluation criteria in section 7.2.3 of the AO. What aspects of the use of Mars infrastructure and the DSN will be evaluated?

A11: The evaluation of the Feasibility of the Mission Implementation will include an assessment of the adequacy of all proposed critical elements. If these elements are proposed, NASA will want to assess the magnitude of resources proposed and their adequacy to accomplish the proposed investigation.

Q12: Several programs could offer reduced cost risk through the use of smaller launch vehicle(s). What is the availability of the Delta II 2425 or other small launch vehicles?

A12: Please check the KSC ELV website @http://elvperf.ksc.nasa.gov for offered configurations of Delta II. Regardless of configuration, proposal costs for a Delta II will either be the cost shown which is the cost of a 7925 or a 10 million dollar higher cost for a 7925H.

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Q13: Are there any limitations on the amount of NASA funds that can be used for the direct purchase of foreign (non-U.S.) goods and/or services for this program, other than launch services? (See Section 3.9.6 of the AO). Will such use of NASA funds be a factor in the evaluation or selection?

A13: While the AO does not directly and specifically provide limitations on the amount of foreign goods and/or services that can be purchased, proposers must comply with all procurement regulations including the Buy American Act discussed in FAR 1825. In addition, it is well understood (especially in today's environment) the difficulties that might be encountered with regards to importing and exporting foreign goods/services, thus this could become a risk consideration during evaluation.

Q14: The AO Section 6.3.1 asks for Letters of Endorsement from "every organization identified as providing no-exchange of funds contributions…" but does not include letters from funded hardware providers. Appendix B, Section I.2 asks for "letters of endorsement from all U.S. and non-U.S. organizations offering critical facilities, goods, hardware, software, and/or services…". Does Appendix B take precedence over the AO?

A14: In general, if potential conflicts are found between the AO and an Appendix, the AO will take precedence. In this case both references stand alone, and can be complementary. One refers to endorsement from non-funded contributions, the other to critical elements which include funded and non-funded items. In the case of non-funded items the same letter can serve both purposes.

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Q15: The AO Section 7.1 says that the evaluation will be conducted by "panels of individuals who are peers of the proposers." It also mentions technical, management, and cost evaluation. Will this be done by Langley for Step 1 proposals?

A15: The technical, management, and cost evaluation will be "led" by the LaRC Earth and Space Science Support Office which is charged with the responsibility of conducting these evaluations for Code S. Participants for the evaluation, however, will be recruited from a wide variety of sources internal and external to NASA, with very few from LaRC. In any case, as with the science peer review, all participants are cleared of potential conflict of interests and sign non-disclosure agreements.

Q16: Section 7.2.3 indicates that proposers will not be penalized for having partially defined teaming/contracting relationships in the Step 1 proposals. However, in past evaluations having contingent delivery contracts has been regarded as a strength. Is this contradictory?

A16: See Answer A6

Q17: If a Co-I's time is contributed, the AO seems to require institutional commitment signatures from an authorizing official on both a Letter of Endorsement and the Co-I's Resume. Is this correct?

A17: Either or both places is fine.

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Q18: Could you specify what to include in the calculation of reserve percentage for cost? For example, should we include reserves for MO&DA, launch vehicle, etc.

A18: Cost reserves should be included in Step 1 proposals for ALL elements of the investigation. Since detail negotiations for these elements will not be completed until the Concept Study in Downselection, and since the proposed Cost to OSS cannot grow more than 20% or to the cost cap (which ever comes first), it is wise to assure that the proposal has room to grow in even these areas.

Q19: If a proposer wants to propose a capability, instrument, or sensor to be flown on a mission, can they propose to this AO?

A19: No. The Scout AO is seeking "investigations" which are either complete missions or are investigations to fly on a non-Code S mission. Separate capabilities, instruments, sensors, or technology items do not meet these submittal requirements and would be rejected without review.

Q20: Is it necessary to discuss all components which are below TRL 7 in the New Technology section which is limited to 5 pages?

A20: Any new technology which is critical to enabling the investigation, or to the enhanced scientific return, or to achieve the proposed cost, must be discussed.

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Q21: If proposers use a NASA-provided launch service, can we assume that the AO provided costs cover all launch services needed for their investigation?

A21: The estimated costs shown in the *Mars Scout Launch Services Information Summary* for each offered ELV capability includes the standard launch site services, a nominal allocation for mission unique options on the launch service based on history, payload processing facility/consumables, telemetry support during the ascent phase through spacecraft separation and ELV-related costs for the launch approval process. These costs are in Real Year dollars and will need to be de-escalated to obtain FY 03 dollars using the AO provided inflation table. Detailed negotiation with KSC for launch services should be accomplished during the Phase A Concept Study.

Q22: Section 2.2 describes the G. Marconi mission in general. Please discuss the status of this mission and the telecomm capability it is to provide.

A22: The status of G. Marconi is uncertain at this time. Consistent with the AO, proposals should be feasible without G. Marconi. The telecomm capability presently envisioned for this mission is described in the document *Mars Relay Description for Scout 2007 Proposals* which can be found in the Mars Scout Library at:

http://centauri.larc.nasa.gov/mars/marslib.html

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Q23: We are proposing an investigation to fly on the CNES'07 which includes U.S. hardware and U.S. Co-Investigators which we are confident will be selected to fly if we have NASA support for funding. Can we submit a Mission of Opportunity proposal to Scout?

A23: Yes, you can submit a proposal. Be aware, however, that such a proposal would need to be for an investigation which would be conducted on the French mission. As such, you will need a letter from the French saying that your investigation is (or is likely) selected pending selection and funding by NASA. Such a proposal would need to meet all of the MOO submittal requirements outlined in the AO including naming the U.S. PI who would head the effort from a NASA standpoint.

Q24: Please provide clarification regarding the agency's intent on proposals evaluated Cat III, which "may be funded for development and may be reconsidered at a later time for the same or other opportunities".

A24: The AO definitions for Categorization come directly from the Federal Acquisition Regulations (FAR) and are as stated. There is no specific intent for Cat III Scout proposals other than that they will NOT be Selected, and would be encouraged to submit to some later opportunity after correcting the scientific and/or technical deficiencies.

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Q25: Can RHU's or other such devices be made available for Mars Scouts?

A25: All GFE that can be offered has already been identified in the AO. Specific requests for specific hardware are the responsibility of the proposer. Investigations which require hardware not in evidence in the proposal are incomplete investigations and could be therefore either rejected or rated as High Risk. Use of spares, however, is allowed in Scout proposals. When appropriate and proposed, "The cost of hardware or software that is inherited from other sources should be estimated as the cost to the proposer to prepare the inherited hardware or software for flight. The proposal should indicate the level of development assumed for any inherited hardware or software before its use would incorporate it into the proposed project."

Q26: Can a Mission of Opportunity investigation fly on a Mars Scout 07 mission?

A26: No. A Mission of Opportunity is by definition an investigation to fly on an existing non-Code S mission. Since the Mars Scout 07 will be a Code S mission and does not currently exist, this does not meet the definition.

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Q27: Section 4.5.3 of the AO is confusing. Are there any costs that must be included in the Total Mission Cost, but which do not count against the $325M cost cap?

A27: All contributions are outside the OSS cost cap, but must be included in the TMC. What section 4.5.3 is saying is that contributions can come from NASA Codes outside of OSS, other agencies, as well as non-U.S. entities.

Q28: Appendix B is very specific about page counts but is unclear with regards to whether an actual cover (not the electronic Cover Page) is acceptable or whether it counts as a page.

A28: Covers for proposals are acceptable and do not count against the page count.

Q29: Can you clarify the conditions under which the Program will provide the Electra UHF communications package to a Scout proposer at no cost?

A29: In general, Scout proposers that desire relaying their data through a Mars Program Infrastructure relay orbiter (e.g., MRO, GMO) are responsible for providing their own UHF subsystem. The only case in which the Mars Program will provide the Electra UHF communications package (including interface definition documentation, technical support) is for a Scout orbiter mission that plans an on-orbit lifetime of 1 Mars year or longer; such proposals are required to carry the Program-provided Electra payload for the purpose of supporting subsequent Mars program missions. (Also see A30)

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Q30: Are all of the Phase B-E costs associated with flying the Electra UHF communications package the responsibility of the MEP?

A30: MEP will provide a fully qualified Electra UHF package including interface and other relevant documentation. MEP will also provide technical support to facilitate its integration into the system design. All other costs must be borne by the proposer.

Q31: My scout proposal concept includes an orbiter and a lander. Per the AO, I understand that if my expected orbiter lifetime is 1 Mars year or longer, I am required to carry a Mars Program provided Electra UHF transceiver for providing relay services to future Mars program missions. Can I also use this payload to support my lander's relay communications needs?

A31: Yes, but you will need to provide your own UHF radio package for your lander. The Program will use the Electra UHF transceiver on your orbiter as a Program resource to support Mars missions, including your Scout mission.

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Q32: Section 3.5 states that the MEP requires missions with more than one year of EXPECTED life in Mars orbit must carry a UHF communications package. Please clarify whether a mission with a DESIGN life (science operations) of precisely one Martian year is required to carry the UHF package.

A32: A mission with a design life of one Mars year could be expected to last in excess of one Mars year in orbit. Therefore, a mission with a design life of precisely one Mars year will be required to carry the UHF package.

Q33: Can a foreign academic institution propose to the Scout AO?

A33: Yes, if the requirements of Section 3.9 and other applicable sections of the AO as appropriate (e.g.; 4.3, 4.4, etc) are met.

Q34: The online website schedule for Downselection shows the Phase A Concept Studies due at Selection plus 6 months and confirmation for flight at Selection plus 8 months. Are site visits included in these schedules? When will these occur?

A34: Site visits will be a part of the Downselection process and are accounted for in the schedule. All post-Selection milestones are tentative at this time.

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Q35: Section 3.7.2 states that the Project Manager responsibility will include award and management of subcontracts. Does that mean that funding for a stand-alone instrument, built either at the PI's institution or other institution, must be as a subcontract from the PM's institution? Or can NASA direct instrument funding to the PI's institution with the balance through the PM's institution?

A35: Section 3.7.2 is intended to describe the nominal roles and responsibilities of a Project Manager and not to levy subcontracting or funding requirements. A PI may propose any subcontracting and funding arrangements consistent with the constraints of Project Management as defined in Section 3.1.

Q36: My Scout proposal carries a small number of RHUs to Mars. Am I required to include costs for launch approval since the Mars Program already has a program to provide launch approval for Mars missions?

A36: TBD